Kotabaru Prawn Fishery Indonesia FMA 713 Three-Year Audit Report

Version 1.2, September 2021

Purpose

The three-year audit report template was developed by FishChoice. The objectives of the three-year audit report are:

- 1. To assess the fishery's MSC performance indicator scores
- 2. To verify the results of the FIP's environmental workplan progress as reported on FisheryProgress
- 3. Optional: To provide recommendations to the FIP on environmental workplan actions that should be modified, including recommendations for additional actions/tasks that should be taken or suggested changes to timelines, to help the FIP achieve their stated objectives.

Completing and Submitting the Audit

FIP Information

Target species scientific name(s) and common name(s)	
[state target stock(s), if relevant]	Penaeus merguiensis (White prawn)
	Metapenaeus brevicornis (Spot prawn, locally known as bintik prawn)
Fishery location	
	South Kalimantan, Java Sea (WPP 713), Indonesia, Indonesia EEZ
Gear type(s)	
	Trammel net
Estimated FIP Landings (weight in tons)	
	500 Tons
Vessel type(s) and size(s)	
	Boats < 5 GT with or without motors
Number of vessels	
	99
Management authority	PT Sekar Laut

Auditor name(s)	Vineetha Aravind, Ph. D. (MSC Technical Consultant)
Auditor Organization/Affiliation	Independent Technical Consultant
Date of report completion	05.09.2022

FIP Background (Optional) This FIP started in 2017 but went inactive later. In 2019 under the 'Fish for Good' programme of MSC, the FIP was revived and a pre-assessment was conducted. It started activities in 2021.

Stakeholder Consultation & Meetings

Name	Affiliation	Date and Subjects Discussed
Timotius Delfri		<u>12 August 2022</u>
Heri Heri	PT. Sekarlaut Tbk	Background of FIP
Bramastrha		 Logbooks used for data collection
		Awareness programmes
		Stakeholder involvement
		Changes due to FIP
		Training programmes
Syahruddin	Penyuluh - Outreach officer, under BRSDMKP - MMAF	 <u>16 August 2022</u> Improvement in fishing practices due to FIP Regulations
Tahrudin	Fisherman representative	• Illegal fishing
		Juvenile fishing and ETP species
		Log book
		Registration of vessels
Agustiana	UNLAM (By email)	<u>31 August 2022</u>
		Juvenile fishingStock assessment

Summary of Findings and Recommendations

This FIP started in 2017 but went inactive later. In 2019 under the 'Fish for Good' programme of MSC, the FIP was revived and a pre-assessment was conducted. FIP activities started in 2021.

The present assessment compares the scores of this pre-assessment. The assessment found no change in score except for one PI (2.4.2). The FIP progress was affected by Covid-19 situations during which travel and meetings were not possible. Still, it can be seen that the FIP is showing considerable progress in the limited time period. There are plans and several pilots have started.

Summary of MSC Performance Indicator Scores

MSC Fisheries Standard v2.01

Principle	Component	1	Performance Indicator	Previous Score 2019	Current Score 2022	Rationale or Key Points
1	Outcome	1.1.1	Stock status	<60	<60	The pre-assessment during 2019 did RBF. The CA scores were below 60 due to lack of data for the fishery. PSA showed that White prawn is at medium risk and Spot prawn at low risk. The 2021 Permen No.33/2021 introduced a simplified logbook for fishermen of vessels below 5GT. Earlier the FIP was collecting voluntary logbook data from 2018 onwards. This new Permen will make the process systematic and compulsory. But the FIP is till using the complete log book as it collects more information. The FIP is collecting the data and sending to MMAF., though there has not been an analysis of the data yet. The FIP is planning to start E-log book. The FIP planning to do a pilot with few boats and later to more boats. The FIP has also had talks with Lambung Mangkurat University (UNLAM) to support biological data collection and analysis. The FIP is progressing in this PI but there is no change in the score.
		1.1.2	Stock rebuilding	NA	NA	As RBF was used to score PI 1.1.1, this PI is not scored.
	Management	1.2.1	Harvest Strategy	<60	<60	The fishery does not have a Harvest Strategy presently. Therefore, this PI scores <60.

		1.2.2	Harvest control rules and tools	<60	<60	 The national meeting conducted by Indonesia Ministry of Fishery in Nov-Dec 2021 can be seen as a step towards developing HS for FIPs in Indonesia. There are no Harvest Control rules and tools which ensures the exploitation rates are reduced when the PRI is approached. Therefore, this PI scores <60. The past years activities shows that the FIP is putting considerable efforts in doing a stock assessment and developing HS and HCR. 'the FIP is under discussion with
				<60	<60	 University and government regarding this. Information about fleet composition is available. All the vessels in the FIP are registered as this will enable them to obtain subsidies and other benefits. Some information on the biology of <i>P.merguinesis</i> from Indonesian waters is available in literature. More information regarding <i>P.brevicornis</i> would help in the assessment.
		1.2.3	Information and monitoring			The FIP has started collecting information with a log book from 2018 onwards but this was voluntary, so it is not filled in by all vessels From 2021, mandatory log book data for small vesselshave been introduced by the Government. As this is a simplified version, FIP is still collecting voluntary log book data and is planning to introduce e-logbooks on a pilot basis. Talks regarding integrating the FIP's version of log book with the Government log book is going on FIP has contacted Lambung Mangkurat University for biological research. This will improve the score for this PI.
		1.2.4	Assessment of stock status	≥80	≥80	Default score of 80 as RBF was used for 1.1.1.
		2.1.1	Outcome	>80	>80	No primary species in this fishery. Default score of 80
2	Primary species	2.1.2	Management strategy	>80	>80	No primary species in this fishery. Default score of 80
		2.1.3	Information	>80	>80	No primary species in this fishery. Default score of 80

	2.2.1	Outcome	60-79	60-79	The PA in 2019 used RBF to assess Secondary species. Data for conducting RBF is available and the fishery is found to be offering medium risk to blue swimmer crab, croaker, catfish and threadfins and low risk to mud crab and mixed finfish. Voluntary log book data was collected by the FIP from 2018 and submitted to MMAF, but is not analyzed and published. The new simplified log book is not collecting data regarding secondary species, so the FIP continues with the earlier version and is planning to start e log book data collection on a pilot basis. The FIP has plans to meet the fishers in person and urge them to collect more information regarding secondary species. This is not yet done due to Covid-19 situations. The score has not improved, yet the FIP is progressing.
Secondary species	2.2.2	Management strategy	<60	<60	There are some management measures for blue swimmer crab and mud crab but not for the other secondary species. It is also not clear that these measures are enforced. Alternate measures to minimize the unwanted catch is not reviewed. The FIP is not yet able to work on this aspect due to Covid-19 restrictions, but has plans to create awareness among fishers. The 2021 national meeting conducted by Indonesia Ministry of Fishery also seems to be promising for better implementation of regulations.
	2.2.3	Information	<60	<60	Quantitative information on secondary species' biology and catch, as well as qualitative information about fishing activities and impacts seems to be limited for the fishery. Till very recently log book filling by fishers of small vessels were voluntary and this limited the information gathering process. The Government decree of 2021 (Permen 33/2021) makes it mandatory for fishers with small boats to fill up log book data. The FIP is also planning to introduce e log book data collection. The FIP has recently distributed three tracking devices and two cameras to fishermen on an experimental basis. They are planning to deploy more after the feedback.

						This will give more information to take the FIP forward.
		2.3.1	Outcome	60-79	60-79	The FIP was collecting ETP species information using the voluntary log book data. Though the Permen in 2021 has made it mandatory to fill a log book, FIP is not relying much on it as it does not collect detailed data.PT. Sekar Laut has prepared materials on ETP species and handling, and are planning to conduct in person meetings with fishers to create awareness. Though there is no change in score FIP seems ot be progressing in this PI.
	ETP species	2.3.2	Management strategy	60-79	60-79	Government Regulation of the Minister of Environment and Forestry Number 20/2018 (Plants and Animals Protected) protects ETP species in Indonesia, but there are no measures in place. The ban on trawl nets and promotion of trammel nets can be considered as a measure to protect ETP species. But the enforcement is not strict and illegal activities are still going on. ETP interactions are not reported. More information can help better scoring of this PI.
		2.3.3	Information	60-79	60-79	Qualitative information regarding ETP species is available, but information regarding ETP interactions and mortality is not recorded regularly. The fishers and Government officials confirm that ETP interactions and mortality is nil. The FIP has started a pilot project on recording videos and using tracking devices on few boats and is planning to include more boats. This is expected to give more information on ETP species interactions and will help score this PI.
		2.4.1	Outcome	≥80	≥80	The PA scored the habitat with CSA and concluded that the impact on habitats is low risk as the substratum is sandy/muddy and gear is passive.
	Habitats	2.4.2	Management strategy	<60	60-79	The Indonesian government has prohibited the use of trawls in Indonesian waters, instead promoting other gear types, particularly for small-scale fishers. Trammel nets are passive and impact on habitats is found to be low.

					However, there are no specific habitat management measures (e.g. number of gear or effort limits, temporal/spatial closures, etc.) in place in the fishery. Considering this and also taking into account the CSA score of ≥ 80 on the impact of fishery on habitats this assessment improves the scores of this PI to 60-79.
	2.4.3	Information	60-79	60-79	There is some qualitative information available from fishers on the types and distribution of main habitats. But there is no ongoing monitoring of fishery interactions with habitat. Therefore, the score is remaining 60-79. The pilot project of video recording and tracking fishing activities by the FIP is expected to provide more information to score higher.
Ecosystem	2.5.1	Outcome	60-79	60-79	The pre-assessment did RBF, scored this PI with SICA and obtained a score of 60. The analysis found out that size captured is mostly affected. There are no regulations on capture of juvenile. No input controls are practiced and fishing continued throughout the spawning season. No size limit is prescribed by the Government. Stakeholder meetings with the fishermen and local government revealed that fishermen are using a mesh size of 1.5" voluntarily and is following it for a long time. According to the fishermen the juveniles mostly hide in mangroves and are not fished. The FIP is conducting good practices workshops to creative awareness. It would be good for the FIP to collect more documented evidences to have a better score for this PI.
	2.5.2	Management strategy	60-79	60-79	Some management measures are in place like minimum size limits for mud crab and blue swimmer crab, but evidence on implementation is lacking. By general theory it can be said that these measures might work. The audit is not changing the PA score.
	2.5.3	Information	60-79	60-79	Sufficient information on the key elements of the ecosystem and likely fishing impacts are available, but it has not been investigated in detail. The small-scale nature of the fishery and available qualitative information helps in inferring the ecosystem consequences of the fishery.

						But lack of monitoring makes it difficult to obtain a higher score. The FIP has contacted University of Brawijaya, Malang which is conducting research in coastal ecosystems. The FIP is planning to collaborate and conduct researches that could provide better information to score this PI.
3	Governance and Policy	3.1.1	Legal and customary framework	60-79	60-79	Indonesia has a number of laws for managing fisheries and marine resources and the environment. There are several ministries that can contribute to the effectiveness of achieving fisheries management objectives. They meet at an annual coordination forum meeting called Management and Utilization of Fisheries Resources. This consists of national, provincial and local fishing unit representatives. This meeting provides a framework for coordination. The recent regulation 33 of 2019 establishing the Fishery Management Councils will operationalize the activities of the FMAs, and should assist with coordination between the provinces, however this has not been implemented. While there is a framework, there is a lack of coordination between the different government levels and what happens at the fishing grounds. Indonesia has a mechanism in place to adjudicate any legal disputes including that of Fisheries Law, through the Constitutional Court. An individual/group can challenge the interpretation of legal articles of any laws in Indonesia. This has been tested. Most of the disputes are resolved at village level, though. The management system has a mechanism to observe the legal rights created explicitly by custom of people dependent on fishing for food or livelihood. There are Laws for fishermen protection and empowerment which is observed. So, SG 80 is met. As these laws are not yet codified within the fishery management system and these rights are considered to

				be unclear, inconsistent (in that not all Indonesian laws include this recognition) and in some cases have no binding power (Huda, N. et. al. 2018). As part of the FIP, MSC training was conducted to stakeholders at Banjarmasin, South Kalimantan Province. PSDKP and DKP Kabupaten show their interest to support the FIP activities, including for the vessel registration and implementing the new Permen 33/2021 on simplified fishing logbook. The meeting conducted by The Ministry of Fisheries including all FIPs during Nov-Dec 2021, has decided to make shrimp fishery a priority in FMA 713 and support regulations and management to take tie FIP forward. Discussions on a Fisheries Management Plan is underway. This is not improving the score but definitely a progress for the FIP.
3.1.2	Consultation, roles and responsibilities	60-79	60-79	The organizational structure, roles and responsibilities of the MMAF and each division are clearly documented in Regulation 7/2018 and includes all areas that are responsible for fisheries management (e.g. compliance, marketing etc). Similarly, Regulation 16/2012 prescribes the function of the National Committee on Fish Stock Assessment which is to provide scientific advice to the MMAF regarding Indonesian fisheries resource status. Members of this Committee represent independent fishery experts, University scientists and members from various fishing associations. Other stakeholders like WWF, Indonesia are also identified. The authorities and responsibilities of Provincial Governments are also well defined. The council for each FMA is legally established in September 2019 through Regulation 33/2019. But the Council for FMA 713 has not yet been implemented. There are several consultation processes in place, including with local fishers. Stakeholder meetings are

				relatively regular however it is unclear whether the information is used to support the management system. There are opportunities and encouragement for all interested parties to be in the consultation process and the system facilitates their effective engagement. Physical meetings and technology driven communication like website, emails and WhatsApp are commonly used. At the national level the Indonesia Ministry of Fisheries conducted meetings in November and December 2021 which had representatives from all FIPs and assured cooperation in implementing management strategy. The Government has decided to support the FIPs in research and management strategy development and implementation. MMAF has also decided to conduct National meetings of FIPs twice every year. No change in score.
3.1.3	Long term objectives	≥80	≥80	Long term fishery management objectives are prescribed in Indonesian Fisheries Law No. 31/2004. The pre- assessment outlines various Regulations and Ministerial decrees that states clear long-term objectives. For eg: Regulation 9/2015 outlines the requirements for implementing the EAFM and makes explicit reference to and defines the precautionary principle. Ministerial Decree 80/2016 establishes the management plan for FMA 713 and all of the fish resources within. It sets out the objectives of fisheries management in FMA 713 which include fish resources and habitat; social and economic; and, governance components. There is an action plan that includes who is responsible and timeframes that are needed to meet the objectives, however, the plan is purported to be a guideline and therefore, may not be required by management policy. The plan references the FAO Code of Conduct for Responsible Fisheries (of which Indonesia has endorsed) and this code includes the precautionary approach, making it implicit within management policy.

					A Ministerial Decree (50/2017) estimating the potential catch (e.g. MSY) and defining the TAC of each major species group in each FMA is implemented following information from the National Committee on the Assessment of fish resources. This Decree states that it is implemented as part of the framework of supporting management policies for sustainable fisheries in each FMA. This defined level of exploitation is used to guide decision making consistent with the MSC standard. There are clear long-term objectives in several pieces of legislation and explicit reference to the precautionary principle and SG80 is met. It is unclear as to whether the decision making guided by the long-term objectives is required by management policy and therefore SG100 is not met.
Fishery specific management system	3.2.1	Fishery specific objectives	<60	<60	Ministerial Decree (e.g. 50/2017) sets a broad TAC for prawns in FMA 713 of 24,324 tons which may be considered an objective designed to achieve a Principle 1 outcome for this fishery. The TAC encompasses all prawn species across all of the provinces and is a broad estimate. There is no fishery specific objective relating to principle 2 outcomes and therefore SG60 is not met. The FMA 713 management plan has broad objectives consistent with Principles 1 and 2, some of which are measurable, however, they are not specific to the prawn fishery. Similarly, regional regulation 13/2018 for the South Kalimantan province has clear long term objectives but they are not fishery specific. The meetings held in Nov, Dec 2021 organised by the Ministry of Fisheries can be seen as a step towards developing a specific management plan for the fishery. The meeting decided to take Shrimp fishery as a priority in FMA 713 and develop a management plan for the same.
	3.2.2	Decision making processes	<60	<60	The DG of Capture Fisheries (DGCF) is the main decision maker of day-to-day fisheries management and is also in charge of implementation of national policies in management.

				The TAC for prawns in FMA 713 is based on scientific advice, landing data and log book data, but management in case the TAC is exceeded is not defined. It is expected that once the FMC is active this may be possible, but for now it is not done. Responsiveness to serious issues like overfishing is limited due to socio-economic dependency on fishing as livelihood. Also lack of scientific data to aid in decision making makes this difficult. Precautionary approach is not followed. Reliable data on fishery's performance and management action is difficult to obtain. MMAF periodically publishes a Regulation that estimates the potential catch (MSY) and the annual production targets (TACs) for each resource in each FMA. There was no evidence of fishery specific information on access to the fishery, subsidies (although these were verbally mentioned at the site visit), compliance issues or management decisions. There is no evidence of legal challenges or judicial decisions taken in relation to the prawn fishery. However, the widespread use of prohibited trawl gear to target prawns definitely compromises the ability of the management system to deliver a sustainable prawn fishery. The decisions of the November -December, 2021 National Meeting by MMAF/Central Government with the FIP implementers of Indonesia seems to be promising and may help score this PI better in the near future.
3.2.3	Compliance and enforcement	<60	<60	Monitoring, control and surveillance (MCS) mechanisms exist to some extent. There are regional groups called Pokmaswas to control and monitor fishing activities. It is not clear to what extent these are implemented in the prawn fishery. Community-based surveillance groups are known to exist in the area, again their effectiveness is not clear. The Government uses subsidies and incentives to move towards more sustainable practices rather than

				enforcing the regulations. The level up to which this is effective is yet to be proven. The Fishery Act 31/2004 sets out penalty schedules. It includes graduated fiscal penalties, suspension or cancellation of licenses, refusal for new licenses and full removal from the fishery as penalty options. A revision of the Act No 45/2009 listed penalties and fines to deal with specific violations. However, essentially there are no sanctions for fishers using < 10 GT vessels (small scale) as they do not require a licence for their fishing operations. The Government encourages fishers to register vessels for fuel subsidies and other benefits. No evidence of laying penalties for not registering vessels were found. Fishers seems to be aware of regulations but compliance is not always found. Till now log books were voluntary, but in 2021 mandatory log books are introduced for small vessels. Trawling is banned, yet many fishers use trawlers. The pre-assessment has reported evidence of systematic non-compliance from site visits. During the present audit the team was not able to show any evidence to prove that systematic non-compliance is not occurring. The National meeting held dusring Nov-Dec, 2021 has decided ot support the FIPs in all ways.
3.2.4	Management performance evaluation	<60	<60	There are mechanisms in place to evaluate some parts of the management system like periodical evaluation of total catch and MSY, monitoring and evaluation of fishing lanes by DGCF. But as fishery specific management is not in place key parts cannot be evaluated. There are occasional internal and external reviews of the management system, but as fishery specific management is yet to be developed this PI scores below 60.

Environmental Workplan Results

Fill in the following table by reviewing the latest FIP's environmental workplan (see the FIP's Documents section on the Details tab on the FIP's FisheryProgress profile) and summarizing the results that have been achieved over the past three years (or since the last audit report was completed) by the FIP. A result is defined as:

- A regulatory policy change or regulatory action to improve the fishery (e.g., a new bycatch provision), or fishing practice change (e.g., a change in fishing gear developed voluntarily and implemented by the FIP) to improve the fishery
- A publicly verifiable positive change in the water (e.g., an increase in biomass of target stock, an increase in population of impacted protected species, a decrease in habitat or ecosystem impacted)
- An activity that led to an MSC performance indicator score change in the fishery

It is advised that auditors determine results through stakeholder consultation, however the FIP's Action Progress tab on FisheryProgress may also be a useful resource. For results to be valid, FIP participants must have directly worked on or contributed to the improvement through one or more actions/tasks in the FIP's environmental workplan. For each result:

- 1. Summarize the result in a short sentence
- 2. Identify the most closely related action(s), as they are listed on the FIP's Action Progress tab on the *FisheryProgress* profile
- *3. Identify the most closely related MSC performance indicator(s) impacted by the result*
- 4. Provide an explanation of steps that the FIP participants took, or the how the FIP's work played a role in supporting and achieving the result

Result	Related Action on FisheryProgress	Related MSC Performance Indicator	Explanation
Data collection of shrimp fishery initiated	Implementation of data collection and data monitoring of shrimp fishery with appropriate methods that is suitable for target species in UoA (Unit of Assessment)	1.2.3	The FIP started collecting data through voluntary logbooks from 2018. The new Permen (33/21) in 2021 made log book mandatory for small vessels with a simplified format. Discussions are underway to modify the format of log book to meet the needs of the FIP. FIP is still collecting data via the voluntary log book format as it is more complete. The FIP has plans to introduce E-log book on a pilot basis.
Discussions with University to conduct stock assessment is underway	Conduct stock assessment for White shrimp and Spotted shrimp on UoA	1.1.1	The FIP implementers visited Lambung Mangkurat University during September 21-September 23, 2021. The University has assured cooperation in stock assessment. The National meeting organized by ministry of Fisheries during November-December 2021 has extended all support to FIPs in Indonesia in conducting stock assessments of target species.
Meetings involving the major stakeholders are underway	Develop a Harvest strategy	1.2.1,1.2.2, 3.2.4	The initial steps to develop a Harvest strategy is taken by the FIP. The FIP is collecting log book data for the past three years (voluntary till 2021 and presently mandatory). The FIP has contacted University to conduct stock

			assessment and the Ministry of Fisheries has extended their help to all FIPs in Indonesia. This seems promising. The assessor recommends the FIP to change the PI addressed by this action point to 3.2.1 instead of 3.2.4 in <i>fisheryprogress.org</i>
Data on bycatch (Secondary species and ETP) and ecosystem status is progressing	Monitoring of bycatch and ecosystem status	2.2.1, 2.2.2, 2.2.3, 2.3.1, 2.3.2, 2.3.3, 2.5.1, 2.5.2, 2.5.3	Log book data is collected by FIPs from voluntary fishermen from 2018 onwards. This is yet to be analysed. The new mandatory log book data collection has started. FIP also has plans to introduce E log books. Work regarding ETP species awareness has got delayed due to Covid-19
FIP associating with research organisations conducting research in coastal ecosystem is underway.	Habitat- ecosystem	2.4.2, 2.4.3, 2.5.1, 2.5.2, 2.5.3	The FIP has carried out discussions with University of Lambung Mangkurat (UNLAM), South Kalimanthan regarding projects on coastal ecosystems. Another organization, the University of Brawijaya, Malang has already conducted research in the coastal habitats and ecosystems and the FIP is trying to collaborate with them too to complete their action plan. A visit to DKP province opened up an idea to work together on a sea grass project in the area which could be beneficial to both the parties.
Discussions with stakeholders and management authority has started	Law enforcement	2.2.2, 2.3.2, 2.4.2, 2.5.2, 3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.2.4	The National meeting with Ministry of Fisheries (Nov-Dec, 2021) has initiated discussions on developing a fishery management plan for shrimp from FMA 713. The FIP will represent industry in the development of a Fishery management council. Stakeholder meeting revealed that the FIP is sourcing only from fishermen complying with the sustainability goals. It would be great if the FIP could show some evidence on this aspect.
Discussions with stakeholders and management authority has started	Develop Fisheries Management Plan in FMA 713 for shrimp fishery	2.2.2, 2.3.2, 2.4.2, 2.5.2, 3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.2.4	The National meeting with Ministry of Fisheries (Nov-Dec, 2021) has initiated discussions on developing a fishery management plan for shrimp from FMA 713. The FIP will represent industry in the development of a Fishery management council.

Supporting References

- Bio Inspecta. 2019. Kotabaru Prawn Fishery Indonesia FMA 713
- Huda, N. et. al. 2018 https://www.shsconferences.org/articles/shsconf/pdf/2018/15/shsconf_icolgas2018_04003.pdf
- FIP Activity report Sep-Dec 2021

- FIP Activity report March-July 2022
- <a href="https://www.ilo.org/dyn/natlex/natlex4.detail?plang=en&
- <u>https://peraturan.bpk.go.id/Home/Details/190283/permen-kkp-no-33-tahun-2021</u>
- Minutes of Meeting Fisheries Improvement Program (FIP) National Meeting with MMAF/Central Government